

AMENDMENTS

Please amend claim 3-23, 26-34, 38, 43, 44, 46, 49-51, and 66-71. Please see Attachment Showing Claim Amendments for a marked up version of the amended claim in which insertions are underlined and deletions are bracketed.

3. (amended) A process according to claim 1, wherein the first temperature is at least about 428°F (220°C).

4. (amended) A process according to claim 1, wherein the first temperature is at least about 446°F (230°C).

5. (amended) A process according to claim 1, wherein the first temperature is at least about 473°F (245°C).

6. (amended) A process according to claim 1, wherein the first temperature is at least about 500°F (260°C).

7. (amended) A process according to claim 1, wherein the first temperature is at least about 536°F (280°C).

8. (amended) A process according to claim 1, wherein the temperature of the molten resin composition is at least about 75°F (42°C) lower than the first temperature.

9. (amended) A process according to claim 1, wherein the temperature of the molten resin composition is at least about 100°F (56°C) lower than the first temperature.

10. (amended) A process according to claim 1, wherein the temperature of the molten resin composition is at least about 150°F (83°C) lower than the first temperature.

11. (amended) A process according to claim 1, wherein the temperature of the molten resin composition is at least about 200°F (111°C) lower than the first temperature.

12. (amended) A process according to claim 1, wherein the temperature of the molten resin composition is up to about 500°F (278°C) above the first temperature.

13. (amended) A process according to claim 1, wherein the fiber material is contacting the molten resin composition for no more than about 5 seconds before cooling of the molten resin composition begins.

14. (amended) A process according to claim 1, wherein the fiber material is contacting the molten resin composition for no more than about 2 seconds before cooling of the molten resin composition begins.

15. (amended) A process according to claim 1, wherein the fiber material is contacting the molten resin composition for no more than about 1 second before cooling of the molten resin composition begins.

16. (amended) A process according to claim 1, wherein the fiber material is impregnated at a rate of at least about 10 feet (305 cm) per minute.

17. (amended) A process according to claim 1, wherein the fiber material is impregnated at a rate of at least about 20 feet (610 cm) per minute.

18. (amended) A process according to claim 1, wherein the fiber material is impregnated at a rate of at least about 30 feet (914 cm) per minute.

19. (amended) A process according to claim 1, wherein the fiber material is impregnated at a rate of about at least 40 feet (1220 cm) per minute.

20. (amended) A process according to claim 1, wherein the viscosity of the molten resin composition is at least about 125 Pascals.

21. (amended) A process according to claim 1, wherein the viscosity of the molten resin composition is at least about 150 Pascals.

22. (amended) A process according to claim 1, wherein the viscosity of the molten resin composition is at least about 200 Pascals.

23. (amended) A process according to claim 1, wherein the viscosity of the molten resin composition is from about 125 to about 250 Pascals.

26. (amended) A process according to claim 1, wherein the reinforcing material is a filament bundle.

27. (amended) A process according to claim 1, wherein the reinforcing material comprises a material selected from the group consisting of glass fibers, carbon fibers, graphite fibers, polymeric fibers, aramide fibers, and mixtures thereof.

28. (amended) A process according to claim 1, wherein the reinforcing material comprises a high silica glass fiber.

29. (amended) A process according to claim 1, wherein the reinforcing material is coated with a sizing or finishing material.

30. (amended) A process according to claim 1, wherein the reinforcing material comprises a high silica glass fiber coated with a sizing.

31. (amended) A process according to claim 1, wherein the resin composition comprises at least one resin selected from the group consisting of ABS, acrylics,

acrylonitriles, epoxies, polyarylether ketones, polyether etherketones, amino resins, phenolic resins, polyamides, polyimides, polyolefins, polycarbonates, polyesters, polyetherimides, polyarylene sulfides, polyvinyl resins, polyurethanes, polysulfones, and copolymers and mixtures thereof.

32. (amended) A process according to claim 1, wherein the resin composition is a thermoplastic composition.

33. (amended) A process according to claim 1, wherein the resin composition comprises at least one thermosetting resin selected from the group consisting of epoxies, polyesters, and phenolic resins.

34. (amended) A process according to claim 1, including the further step of drawing the prepreg material through a sizing die.

38. (amended) A process according to claim 1, including a further step of providing a cladding layer to the impregnated fiber material.

43. (amended) A process according to claim 1, including a further step of cutting the impregnated fiber material into lengths of from about 3 mm to about 76 mm.

44. (amended) A process according to claim 1, wherein the impregnated fiber material is a flattened fiber bundle.

46. (amended) A process according to claim 1, wherein the resin composition includes a resin capable of forming crystalline regions upon cooling.

49. (amended) A process according to claim 1, comprising a further step of forming the prepreg into a desired shape.

50. (amended) A process according to claim 49, wherein the prepreg is formed by a method selected from the group consisting of lay-up, compression molding, injection molding, thermoforming, blow molding, calendering, extrusion, casting, laminating, filament winding, rotational molding, transfer molding, stamping, and weaving operations, and combinations thereof.

51. (amended) An article formed by the process of claim 1.

66. (amended) An apparatus according to claim 63, wherein at least one shear pin has an opening to provide the molten resin composition.

67. (amended) An apparatus according to claim 63, wherein at least one shear pin is connected to a heat source for heating the shear pin.

68. (amended) An apparatus according to claim 62, wherein said container further comprises a unit for applying pressure to the resin composition.

69. (amended) An apparatus according to claim 62, wherein said outlet is a sizing die.

70. (amended) An apparatus according to claim 62, further including molding equipment for forming the reinforced matrix resin composition into an article of a desired shape.

71. (amended) An apparatus according to claim 62, wherein the heater is selected from the group consisting of radiant heaters, inductive heaters, infrared tunnels, ovens, and combinations thereof.